

IN THE CLAIMS:

The claims have been amended as follows:

1 1. (Twice Amended) A method of etching a substrate, comprising:
2 measuring a reflectance signal from a reflective material deposited on said substrate as
3 the substrate is being etched;
4 correlating the substrate etch rate to the reflectance signal from the reflective material;
5 and
D2 6 using the etch relation between the substrate and the reflective material to determine
7 the etch target,
8 wherein said reflective material is isolated from an etching process, and
9 wherein the etch relation is determined by a rate of a metal oxide etch.

7. (Twice Amended) The method of claim 1, wherein said reflective material comprises
metal having said metal oxide thereon, and said substrate etch also etches said metal oxide on
D3 said metal, and wherein the reflectance correlation uses said metal as a secondary film only to
correlate, and trigger an endpoint on the substrate as a primary film being etched,
wherein an output being monitored for endpoint detection is not physically
representing the primary film being etched.

1 12. (Twice Amended) A method of etching a material, comprising:
2 measuring a reflectance signal from a correlation material that is removed from the
3 path of a second material that is to be etched as the second material is etched;
4 correlating the second material etch rate to the reflectance signal from the correlation
D4 5 material; and
6 using the etch ratio between the correlation material and the second material to
7 determine the etch target,
8 wherein said correlation material is isolated from an etching process, and
9 wherein the etch ratio is determined by a rate of a metal oxide etch.

18. (Twice Amended) The method of claim 12, wherein said second material etch also etches said metal oxide on said metal, and wherein a thin film reflectance correlation uses said metal as a secondary film only to correlate, and trigger an endpoint on the second material as a primary film being etched,

DS wherein an output being monitored for endpoint detection is not physically representing the primary film being etched.

23. (Twice Amended) A method of etching a semiconductor substrate, comprising:
measuring a reflectance signal from an opaque material deposited on said semiconductor substrate as the semiconductor substrate is being etched;
correlating the semiconductor substrate etch rate to the reflectance signal from the opaque material; and
using the etch relation between the semiconductor substrate and the opaque material to determine the etch target,
wherein said opaque material is isolated from an etching process, and
wherein the etch relation is determined by a rate of a metal oxide etch.

29. (Twice Amended) The method of claim 23, wherein said opaque material comprises metal having said metal oxide thereon, and said substrate etch also etches said metal oxide on said metal, and wherein the reflectance correlation uses said metal as a secondary film only to correlate, and trigger an endpoint on the substrate as a primary film being etched,
wherein an output being monitored for endpoint detection is not physically representing the primary film being etched.

☒ Please add the following new claims:

37. The method of claim 1, wherein a change in a measurement of said reflectance signal is determined by a rate of said metal oxide etch.

38. The method of claim 12, wherein a change in a measurement of said reflectance signal is determined by a rate of said metal oxide etch.

1 39. The method of claim 23, wherein a change in a measurement of said reflectance signal is
2 determined by a rate of said metal oxide etch.

3 40. The method of claim 1, wherein said etch target is determined before said metal oxide is
4 completely removed.

5 41. The method of claim 12, wherein said etch target is determined before said metal oxide is
6 completely removed.

7 42. The method of claim 23, wherein said etch target is determined before said metal oxide is
8 completely removed. --
